## Highfield Primary School



## Design & Technology

<u>Topics</u>

Autumn – Get Up, Stand Up

Spring – Creative Community

## Summer – Tomorrow's World

	2024-25					
Autumn term			Spring term		Summer term	
	1	2	1	2	1	2
Nursery	<ul> <li>Construction</li> <li>Christmas decoratio</li> <li>To explore materials properties</li> <li>Scissor skills</li> </ul>		<ul> <li>Construction</li> <li>Occupations</li> <li>Shrove Tuesday (patheta)</li> <li>Scissor skills</li> </ul>	incakes)	<ul> <li>Construction</li> <li>Scissor skills</li> <li>Healthy foods</li> </ul>	
Reception	<ul> <li>Cooking and Hygiene</li> <li>Making instruments with junk modelling</li> </ul>		<ul> <li>Healthy Living - Healthy Meal Plates</li> <li>Cooking (Jam Sandwiches, Flapjacks, Pancakes and Easter Bunny cakes/chick nest cakes)</li> <li>Making The Bog Baby - bonding and sticking in various ways</li> </ul>		<ul> <li>Creating/making the farm of 'What the ladybird heard' so children can retell the story/roleplay.</li> <li>Ladybird biscuits</li> </ul>	
Year 1		<u>Mechanisms (Levers</u> <u>and Sliders)</u> Plan, make and evaluate a product which moves – e.g. Moving puppet/picture animal using sliders and levers.			<b>Textiles</b> Use materials to design appropriate clothing for a particular purpose.For example, design and make an <b>umbrella</b> or a <b>raincoat</b> for a character.Retrieval/review: Differences between materials (EYFS)	Cooking & Nutrition Use the basic principles of a healthy and varied diet to prepare dishes. Begin to understand where food comes from. Plan and prepare a healthy, savoury playtime snack.

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		Textiles (Binka	Cooking & Nutrition		Structures (Freestanding	
		Bookmarks)	Use the basic		<u>Structures)</u>	
		Evaluate an existing	principles of a healthy		Design new play	
		product. Design and	and varied diet to		equipment for our	
		make a <b>Christmas</b>	prepare dishes.		school playground (e.g.	
		Decoration.	Describe ingredients.		swings and slides)	
			Understand where		ensuring structures are	
r 2		Retrieval/review:	food comes from.		made strong and	
Year		Choosing of	Make a <b>salad</b> .		stable.	
7		appropriate				
		materials for the	Retrieval/review:		Retrieval/review:	
		desired product,	Where food comes		Joining different	
		functional,	from, hygiene, cut,		materials and making	
		appealing (Year 1)	peel, grate (Year 1)		'small worlds' (EYFS)	
		Textiles (Puppets)		Cooking & Nutrition		Structures (Shell
		Design using		Design & make		<u>Structure)</u>
		sketches &		nutritious meals using a		Design and make
		diagrams, make &		heat source (e.g. <b>soup</b> ).		packaging for an item to
		evaluate a <b>puppet</b> .				ensure it can be
				Retrieval/review: What		transported safely (e.g. a
		Retrieval/review:		is a healthy meal? Cut,		box for cookies).
		Running stitch, cut,		hygiene, peel, grate,		Use stiffening and
		shape, <b>Ann Lowe</b> ,		Yotam Ottolenghi (Year		strengthening techniques
r 3		Thomas Stevens		2)		to make your packaging
Year		(Year 2)				durable.
<b>~</b>						
						Retrieval/review: How
						freestanding structures
						are made strong and
						stable, reinforce,
						strengthen, assemble,
						join, <b>Isamu Noguchi</b>
						(Year 2)

Year 4	Cooking & NutritionDesign & makenutritious mealsbeing safe andhygienic. Meals mustbe prepared using aheat source (e.g.paninis/hotsandwiches).Retrieval/review:How to safely use aheat source whencooking, peel, chop,slice, grate, mix,spread (Year 3)Structures (Frame	Mechanisms (Levers and Linkages) Design & make a moving picture which uses levers and linkages to help tell a story (e.g. The Iron Man).Retrieval/review: Sliders and levers, join, combine (Year 1)Cooking & Nutrition	Electrical Systems Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] Make a wire loop (buzzer) game using a circuit.	
Year 5	Structures (Frame Structures)Architecture/civic planning in harmony with nature.Evaluate impact of design & technology on daily life & wider world.Design and make a model of an eco- friendly building using a frame structure.Retrieval/review: Strengthening and stiffening shell structures, corrugate, laminate, rib, reinforce, assemble (Year 3)	Cooking & Nurrition Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. £2 challenge – design and make a healthy family meal for £2. Retrieval/review: Food hygiene (Year 4) What is nutrition? Hygiene, peel, chop, slice, grate, mix, spread (Year 3)	Mechanisms (Cams) Use a cams mechanism to create a moving toy that is aimed at KS1 children. Retrieval/review: Levers and linkages, assemble, join, combine, input, process, output, pivot, linear, reciprocating, rotary, oscillating, Mary Anderson (Year 4)	

	3D Printing (CAD)	<u>Cooking &amp; Nutrition</u>	Prop Design
	Program, make &	( <u>Bread Making)</u>	Prop design: Use
	evaluate a key ring	Understand seasonality,	mechanical and
	using the 3D printer.	and know where and	electrical systems in a
	Use market research	how a variety of	product. Test and
Year 6	to form a design brief.	ingredients are grown, reared, caught and processed. Cooking & nutrition – <b>baking bread</b> – yeast/micro-organisms. Retrieval/review: Budget and nutritional considerations when cooking, hygiene, peel, chop, slice, grate, mix, spread, knead, bake, <b>Miguel Barclay</b> (Year 5)	evaluate own products. Retrieval/review: Circuits, input, process, output, Ann Makosinski (Year 4)